9/28 R8750—10 A

PATTERNS OF CONTRACEPTIVE USE AROUND THE WORLD

by Ann Larson

A Publication of the
Population Reference Bureau, Inc.

JULY
1981

Increasing the use of contraceptives is seen as a solution to world-wide concerns about high rates of population growth, the health implications of closely spaced births, and the strains that unwanted births place on families. This report contributes to a better understanding of the present levels and patterns of national contraceptive use by drawing together comparable statistics from diverse sources for 63 countries. Details about the most prevalent contraceptive techniques and the age of the women using the methods are given, and there is some discussion about the demographic implications of these patterns.

PATTERNS OF CONTRACEPTIVE USE AROUND THE WORLD *was published by the Population Reference Bureau with the support of the Demography Division of the Office of Population, U.S. Agency for International Development under contract AID/DSPE-C-0024, "Compilation and Analysis of Population Data." Leela Visaria, former PRB demographer, collected much of the data presented and her initial notes were indispensable in preparing this report. The assistance of numerous experts, agencies, institutions and individual countries in supplying data is also gratefully acknowledged.*

Single copies of PATTERNS OF CONTRACEPTIVE USE AROUND THE WORLD *are available free from PRB. There is, however, a $1.00 handling and postage charge for mail orders. (Bulk order handling charges are available upon request.) Send order and remittance to the Population Reference Bureau, Circulation Department, 1337 Connecticut Avenue, N.W., Washington, D.C. 20036 U.S.A. (202) 785-4664.*

Family planning has become a normal part of married life for a growing proportion of women in parts of the world where contraception was virtually unknown only twenty years ago. The specific level of contraceptive use and the tempo of its change has become an avid interest of policymakers and others concerned with the social and economic quality of life.

Most people interested in specific levels of contraceptive use believe that it is, above all, a humanitarian issue. In 1968 the United Nation's Teheran Conference on Human Rights affirmed that couples have a basic right to decide on the number and spacing of their children. This was reaffirmed at the 1974 World Population Conference in Bucharest where many other population and family planning issues were hotly debated. In some Latin American countries one of the main reasons for establishing family welfare programs that include family planning services has been the large number of women admitted to hospitals because of unsanitary, illegal abortions. Higher levels of contraceptive use could reduce unwanted pregnancies and diminish the incidence of abortion. African leaders in Zaire, Mali, and other countries have been concerned about the dangers of high fertility rates to the health of women and children. In these countries family planning is promoted as an integral part of successful maternal and child health programs.

For a couple, contraception means the freedom to plan family size and the timing of pregnancies. For nations, an increase in the proportion of couples using contraception, without changes in other factors affecting fertility, reduces the number of births. Interest in the potential demographic impact of family planning is a direct result of the perception that the rapid population growth characterizing most developing countries today frustrates their efforts to improve the lives of their people. But contraceptive use is not the only factor affecting a country's birth rate. The level of contraceptive use cannot simply be inferred from a birth rate because other variables, most importantly, marriage patterns, breast-feeding habits, induced abortion, and involuntary sterility, also have a direct impact on fertility.

The biological ability to sire or bear children varies between populations. High proportions of childless women are common in many African countries and in other areas with widespread malnourishment and disease. Cameroon and Gabon have birth rates lower than other sub-Saharan African countries.[1]

[1]In Gabon there are an estimated 33 births per 1,000 population in a year; in Cameroon, Central African Republic, and Equatorial Guinea, the rate is 42. These are low compared to rates of over 45 in the remainder of the sub-Saharan Africa. Carl Haub. *1981 World Population Data Sheet*, Washington, D.C.: Population Reference Bureau, 1981.

They appear to result from higher levels of sterility rather than a conscious effort to limit births. As these areas develop it is likely that fertility will increase, at least temporarily, as a result of improved health conditions.

The age at which women enter marriage or other relatively stable sexual union,[2] the proportion who marry sometime during their reproductive years, and the probability of them remaining married determines the proportion exposed to the risk of pregnancy. The longer a woman is married during her reproductive period (approximately ages 15-49) the more time she has to bear children. Other factors being equal, one would expect fertility to be higher in Bangladesh where the average age of marriage is 16, than in Sri Lanka which has an average age of marriage of 24.[3]

Breast-feeding can inhibit ovulation for many months after childbirth, lowering the probability of another pregnancy. In some countries women nursing a child avoid or reduce the frequency of sexual intercourse because of cultural taboos.

Another factor affecting fertility is abortion. Since abortion is illegal in many countries it is difficult to determine accurately its incidence. Even when the practice is legal, statistics are not always compiled or circulated. However, the abortion rate is known to be high in several countries, contributing to birth rates lower than would be expected from the level of contraceptive use.

This report will not attempt to determine family planning's effects on a country's birth rate. That would require reliable information about many additional factors. The purpose of this paper, although narrower, is nonetheless important. It responds to the growing interest in contraceptive behavior around the world and the need for descriptions of the patterns of use.

After briefly discussing sources of information and explaining the term "contraceptive prevalence rate," the report presents the most recent information available on overall levels of contraceptive use, methods, and ages of married female contraceptors around the world. The text will strive to identify regularities in the patterns of behavior of women in diverse cultural and economic settings, but the primary goal is to supply the reader with an international compilation of data on family planning practices.

Sources of Information on Contraceptive Behavior

Estimates of the prevalence of contraceptive use can be based on service statistics from family planning programs, tallies of the supply of contraceptives sold or distributed, or surveys on the family planning practices of the population. Until very recently most of the information available for developing countries came from service statistics which originate from administrative records indicating the number of new clients, or "acceptors," at family planning clinics. In order to convert the number of acceptors to the number of current users, assumptions are made about the average length of time acceptors will continue using each method. Statistics based on contraceptive supply must also take into account these continuation rates. Inaccurate assumptions will bias the results.

Service statistics can give a distorted view of the prevalence of contraceptive use. Regardless of how the data are collected it is difficult to distinguish between clients or consumers who are starting contraceptive use and those who are continuing use. Service statistics are most likely to inflate the number of acceptors.

Another serious problem with administrative sources of information is that they measure only the use of modern contraceptives, excluding methods such as withdrawal which, if properly practiced, can be effective. Service statistics also tend to measure only contraception by women who receive supplies from government or private programs. In many countries a large share of users receive supplies from other sources such as smaller organizations or commercial distributors. These omissions give a downward bias to the derived prevalence rate.

A more straightforward approach to measuring contraceptive practice is to ask a representative sample of individuals about their family planning behavior, knowledge, and opinions. Unfortunately for the purposes of international comparison, such data are not available for the majority of countries. Nationwide surveys, particularly in developing countries, require technical sophistication to design and administer the questionnaire and select a sample that is nationally representative.

The number of countries that have conducted contraceptive use surveys has increased dramatically in the past decade. In 1965 demographer Parker Mauldin was able to report the results of KAP (knowledge, attitude, and practice) surveys from only 14 countries, and only six were from the less developed world.[4] Today, data based on surveys are available for over 50 countries. This is undoubtedly a result of the heightened concerns about population growth and maternal and child health as well as financial and technical assistance from the United Nations' Fund for Population Activities (UNFPA), United States Agency for International Development (USAID), and similar agencies in other developed countries.

Some countries conduct national surveys as part of their family planning or vital statistics efforts. In other countries the contraceptive use surveys are administered by the government in collaboration with international efforts. The two major international programs are the World Fertility Survey (WFS) and the Contraceptive Prevalence Studies (CPS).

The WFS project is directed by the International Statistical Institute in London. Through WFS, international assistance is given to developing countries to design, conduct, and analyze national fertility and family planning surveys. These have been tailored to fit the specific needs of each country while maintaining international comparability by using standard definitions and questions. In developed countries surveys taken in the late 1970s have been designed in cooperation with WFS in order to improve international comparisons and make the results more readily available.

The CPS program is conducted by Westinghouse Health Systems, Inc. and the United States Center for Disease Control. They have a narrower focus than the World Fertility Survey, asking fewer questions, and concentrating on quickly col-

[2]"Marriage ought to be understood to imply most socially recognized and relatively stable sexual unions, not just those unions with formal legal or religious standing." Jane S. Durch, "Nuptiality Patterns in Developing Countries: Implications for Fertility," *Reports on the World Fertility Survey*, No. 1, Washington, D.C.: Population Reference Bureau, December, 1980. This broad meaning of the term is used throughout this report.

[3]Actually, very young ages of marriage found in many Middle South Asian countries are associated with high rates of adolescent sterility causing fertility to be lower than would be expected. Population Division, United Nations, "Selected factors affecting fertility and fertility preferences in developing countries. Evidence from the first fifteen WFS countries." Paper presented at World Fertility Survey Conference, London, July 7-11, 1980. Nevertheless, age at marriage is an important determinant of fertility. (See Durch, 1980.)

[4]W. Parker Mauldin, "Fertility Studies: Knowledge, Attitude, and Practice," *Studies in Family Planning*, June, 1965.

lecting, tabulating, and disseminating information on the basic parameters of fertility and contraceptive use behavior. Together, the WFS and CPS provide information for 34 countries, and more results are anticipated in the near future.

To be sure, survey data can be only as accurate as the information offered by the respondents. Contraceptive behavior is a personal matter and it is easy to imagine women being reluctant to discuss such intimate aspects of their lives. However, it is encouraging that interviewers from a wide variety of settings express confidence that the women they questioned willingly gave frank and honest replies. Surveys are also of limited accuracy because they are based on reports from only a sample of eligible women. This produces a margin of error surrounding the results.

Despite the potential shortcomings of surveys, under most circumstances this report uses survey data to describe the levels and differences in contraceptive use because of their advantages over service statistics. With surveys it is not necessary to make assumptions about the length of contraceptive use, and all contraceptive behavior is included, regardless of the type of method or its source. Rates estimated from program statistics for the same year may vary because they employ different estimates of the population base. With a representative sample, the base for the prevalence rate (all married women in the reproductive ages) is derived directly from the survey results.

When nationwide survey data are absent, service statistics or tallies of contraceptive supplies have been used in the report if they seem to provide a reasonable estimate of the prevalence of family planning. In a few cases existing survey data were not used because they gave results judged unreasonable and contradicted by other evidence of contraceptive use. When more than one data source is available, that which is most recent and consistent with past trends is shown.

It should be kept in mind that all of the surveys were not conducted under the same procedures. Methods of sampling the population, questions on current contraceptive use, design, and overall objectives of the surveys vary considerably, although the WFS and CPS have gone a long way towards standardizing survey data. It is not possible in this report to assess the quality or the degree of comparability of each survey. Therefore, caution should be used in interpreting differences among two or more countries.

The Contraceptive Prevalence Rate

The contraceptive prevalence rate (the percentage of women in a stable sexual union and of reproductive age who currently are using any method of contraception) provides a "snapshot" of the behavior of a population at the time of interview, or the time specified in calculations from service statistics. With survey data, the measure of current use is taken directly from women's reports of their own behavior in the immediate past. It reflects both the number of women who have ever used a contraceptive method and the average length of time methods are used. Two countries could have the same current contraceptive use rate but different continuation rates that are offset by complementary ever-use rates.

The preferred population base for the contraceptive prevalence rate is women in relatively stable sexual unions, including, but not limited to, those legally married. Women in consensual unions are included in the surveys of most Caribbean and Latin American countries and, increasingly, of the more developed countries. In these areas significant proportions of women in certain age groups exposed to the risk of pregnancy are not legally married. However, in other cases contraceptive use surveys are restricted to women who have been legally married at least once. In those countries this group represents the vast majority of women who are exposed to the risk of pregnancy and it is feared that unmarried women will be offended by questions about their contraceptive behavior.

An important discrepancy between surveys is the age of women interviewed. The majority of surveys used in this report selected women from the 15-49 age group. Yet, some had a narrower age range. In countries where the average age of marriage is high, married women under age 18 or 20 may be too rare to include in a survey. Similarly, older women often are excluded in countries with low fertility and widespread use of contraception, since births to women over age 39 are infrequent and births to women over age 44 exceedingly rare. Even in high fertility countries few women over age 44 give birth, and some surveys omit this group. A bias occurs when comparing prevalence rates based on different age groups because contraceptive use rates are lowest for the youngest and oldest ages. A narrower age range will inflate the proportion of contraceptive users.

The proportion of married women using contraception varies tremendously from country to country. Table 1 shows recent prevalence rates for all countries which have reliable estimates. The type of data source, the reference year, and the women's age group are listed. Whenever the secondary sources provide sufficient information, the prevalence rate is given only for women aged 15-44 to enhance comparability.

Recorded contraceptive prevalence rates range from 81 percent in Belgium to 2 percent in Nepal. Regional tendencies can be observed if a prevalence rate is given in broad categories: *very low*, if less than 15 percent of married women use contraception; *low*, if the proportion is 15-39 percent; *moderate*, if it is 40-59 percent; and *high*, if the contraceptive prevalence rate is over 60. With few exceptions, European countries and more developed countries outside of Europe have high prevalence rates and African countries have very low rates. But grouping the countries by geographic region does not completely explain the variation. Asia and Latin American countries display remarkable differences in contraceptive practices.The range is even more pronounced when one considers the best "guess-timate" for countries without data.

In the four Southwest Asian countries in Table 1, the contraceptive use level ranges from low to moderate. Of the countries not listed, lower levels of use probably exist in Saudi Arabia and the smaller countries on its southern border. Higher levels are likely in Cyprus and Israel. Middle South Asia, the poorest region in the continent, has low or very low prevalence rates.

Southeast Asian countries (except for Singapore) shown in Table 1 have moderate levels of family planning practice. Those that are not included, such as Vietnam, Laos, Cambodia, and Burma, are unlikely to have rates which are as high, but reliable information on these countries is not available. Singapore, which has attained a relatively high level of economic development, resembles the prosperous East Asian countries of Hong Kong, Japan, and Taiwan. All have a high proportion of married couples using contraception. South Korea has a lower level of use, but its rate has been increasing rapidly in recent years and it is not improbable that in the future Korean women will be practicing family planning to the same extent as women in neighboring countries.

There is some evidence that the prevalence rate in the People's Republic of China is quite high. This comes from surveys

Table 1 Description of Source of Contraceptive Use Prevalence Data and Contraceptive Use Prevalence Rate for Selected Countries

Region and Country	Type of Source[1]	Age Group of Respondents	Year[2]	Percent of Women in Union in Reproductive Age Using Any Contraceptive
NORTHERN AFRICA				
Egypt	Survey	—	1978	20
Morocco	Service Stat.	15-49	1974	7
Tunisia	Service Stat.	15-44	1977	17
SUB-SAHARAN AFRICA				
Ghana	Service Stat.	15-44	1978	4
Kenya	WFS	15-44	1977-78	7
Mauritius	Survey	15-49	1975	50
SOUTHWEST ASIA				
Jordan	WFS	15-44	1976	23
Lebanon	Survey	15-49	1971	53
Syria	Survey	15-49	1973	23
Turkey	WFS	15-44	1978	40
MIDDLE SOUTH ASIA				
Afghanistan	Survey	15-49	1972-73	2
Bangladesh	WFS	15-44	1976	8
India	Service Stat.	15-44	1977-78	24
Nepal	WFS	15-44	1976	2
Pakistan	WFS	15-44	1975	5
Sri Lanka	WFS	15-44	1976	33
SOUTHEAST ASIA				
Indonesia	WFS	15-44	1976	28
Malaysia	WFS	15-44	1976	36
Philippines	WFS	15-44	1978	38
Singapore	Survey	15-44	1977	71
Thailand	CPS	15-44	1978	53
EAST ASIA				
Hong Kong	WFS	15-44	1977	77
Japan	WFS	15-44	1974	68
Korea, Rep. of	CPS	15-44	1979	54
Taiwan	Survey	15-44	1977	65
NORTH AMERICA				
United States	WFS	15-44	1976	68
MIDDLE AMERICA/CARIBBEAN				
Barbados	Survey	15-49	1971	64
Costa Rica	CPS	15-44	1978	65
Dominican Republic	WFS	15-44	1975	33
El Salvador	CPS	15-44	1978	34
Guadeloupe	WFS	15-49	1976	44
Guatemala	CPS	15-44	1978	18
Haiti	Service Stat.	15-44	1976	5
Honduras	Service Stat.	15-49	1976	12
Jamaica	WFS	15-44	1975-76	41
Martinique	WFS	15-49	1976	51
Mexico	CPS	15-44	1978	42
Panama	CPS	15-44	1979	61
Puerto Rico	Survey	15-44	1974	62
Trinidad & Tobago	Survey	15-44	1970	44

Region and Country	Type of Source[1]	Age Group of Respondents	Year[2]	Percent of Women in Union in Reproductive Age Using Any Contraceptive
SOUTH AMERICA				
Chile	Service Stat.	15-44	1978	43
Colombia	CPS	15-44	1978	49
Ecuador	Service Stat.	15-44	1975	6
Guyana	WFS	15-44	1975	32
Paraguay	CPS	15-44	1977	24
Peru	WFS	15-44	1977-78	34
Venezuela	WFS	15-44	1977	44
NORTHERN EUROPE				
Denmark	WFS	18-44	1975	76
Finland	Survey	18-54	1971	77
Ireland	Survey	15-44	1973	60
Norway	WFS	18-44	1977	71
United Kingdom	WFS	16-49	1976	75
WESTERN EUROPE				
Belgium	WFS	16-44	1975-76	81
France	WFS	20-44	1978	79
Netherlands	WFS	20-44	1975	70
EASTERN EUROPE				
Czechoslovakia	Survey	15-49	1970	66
Hungary	WFS	15-39	1977	73
Poland	Survey	15-49	1972	57
Romania	WFS	15-49	1978	57
SOUTHERN EUROPE				
Spain	WFS	15-44	1977	51
Yugoslavia	Survey	15-49	1970	59
OCEANIA				
Australia	Survey	15-44	1971	67
Fiji	WFS	15-44	1974	41

[1] The following terms are used to describe the source of the contraceptive use prevalence rate:

CPS: Contraceptive Prevalence Survey conducted by the Westinghouse Health System, Columbia, Maryland or the U.S. Center for Disease Control, Atlanta, Georgia.

Service Stat.: Program statistics based on number of acceptors or amount of supplies distributed and assumptions about discontinuation rates.

Survey: A nationwide survey conducted by the national government or an independent organization, but not related to CPS or WFS.

WFS: Survey sponsored directly by the World Fertility Survey project, London. In the case of developed countries the nature of the survey, although conducted in cooperation with WFS, varies considerably to reflect the interest and needs of the executing agency.

[2] The year refers to the time the interviews were conducted or the reference point.

of workers in factories or in isolated cities, as well as official figures from family planning associations in several provinces. Unfortunately, these estimates are too fragmented to use. Since evidence on the birth rate, incidence of abortion, and marriage patterns is still subject to some question, the contraceptive prevalence estimates cannot be evaluated.

Latin American countries maintain their diversity even within broad regional categories. Several countries in the Middle America-Caribbean region have high levels of contraceptive use (Costa Rica, Panama, and Puerto Rico). The majority are in the moderate range; yet, some, such as Haiti, the Dominican Republic, Guatemala, and Honduras, have remained low or very low.

Data on South American countries indicate low to moderate levels of family planning. Ecuador's very low prevalence rate is an exception, and it can be assumed that Bolivia has a similar level. The low fertility rates of Argentina, Chile, and Uruguay suggest that the level of contraceptive use is high in comparison to other Latin American countries. But, reports of high incidence of abortion may mean that family planning is less common than would be expected. This appears to be the case in Chile, where the estimated prevalence rate (based on the supply of contraceptives in the country) is 43 percent and the crude birth rate is 21 births per 1,000 persons. Other countries with birth rates in the low 20s have contraceptive prevalence rates of about 60.

Reliable estimates are not available for most of sub-Saharan Africa, but contraceptive use can be assumed to be very low. Observations and studies by demographers such as John C. Caldwell of the Australian National University[5] suggest that few countries would achieve rates higher than one percent during the 1970s.

Surveys have been taken in Africa, but they tend to be confined to particular villages or regions of cities. Even when nationally representative samples have been used, published results discuss attitudes toward contraceptive use, awareness of methods, and ever-use of specific methods rather than levels of current use which are frequently too low to be useful for analysis. Only Egypt, Kenya, and Mauritius have prevalence rates based on surveys.

Yet many African governments, once ambivalent or formally opposed to fertility control, are now more receptive to family planning, either as a component of their economic development policy or as an integral part of maternal and child health programs. As family planning becomes more widespread, and awareness and interest grow among people and governments, more service and survey data should become available. Efforts are already well underway for surveys in 11 African countries under the auspices of the World Fertility Survey and results will be available in the near future.

The North African countries listed have contraceptive use rates which are higher than those found in the rest of Africa, and more closely resemble patterns in Southwest Asia. The island country of Mauritius has achieved a moderate level of use.

The highest prevalence rates in the world are found in Northern and Western Europe and in the developed nations of Australia and the United States (although several Asian and Latin American countries have also achieved high rates). More moderate levels of use are found in Southern Europe, parts of Eastern Europe and Ireland.

As a United Nations' study of fertility and family planning in developed countries concluded, among countries with high rates, differences in contraceptive prevalence are relatively uninteresting.[6] They reflect variations in the exposure to the risk of pregnancy through marriage patterns and fecundity, rather than resistance to the use of contraceptives. Any rate from approximately 65 to 80 percent seems to represent a saturation level at which virtually all married women who may need contraception are using a method.

In developed countries women on average desire small families. This means that through most of their childbearing years they want to avoid pregnancy. In the developing world family size norms vary and within countries can change over time, but in most of the countries women want more children than is common in developed countries. Although these women may plan their families as effectively, at any one time they are less likely to be active contraceptive users; this lowers the saturation level. However, the level can change and over time should rise.

Method Mix

Although the contraceptive prevalence rate describes the overall family planning practices of married women in a country, details about the specific methods women rely on can sharpen the view of contraceptive behavior. Methods of contraception often are grouped into three broad categories: traditional, surgical sterilization, and modern reversible methods.

Traditional methods are those which do not require chemical or mechanical supplies. The most common are rhythm, withdrawal, and abstinence, but in some areas folk methods may be important. Even though withdrawal and abstinence are such elementary techniques to avoid pregnancy, an analysis of the prevalence of each type of contraceptive method will show that traditional methods are not necessarily the ones used most frequently.

Surgical sterilization is the only method which, in practice, is irreversible and virtually 100 percent effective. Since there are both male and female sterilization procedures, if a woman's partner has been sterilized she is recorded as being protected by sterilization. The popularity of sterilization has grown in recent decades partly due to the development of safer and simpler operating procedures. Not only is sterilization more attractive to potential patients, but the improvements have made it possible for programs to expand their services. Whenever the data permit only the women (and their husbands) who were sterilized for family planning purposes and not for other medical reasons are included as contraceptors.

Modern reversible methods encompass a wide variety of contraceptive techniques. Oral contraceptives, developed in the 1950s, revolutionized family planning by providing an effective, easy-to-use, coitus-independent form of birth control, although the method is not completely free of side effects. The modern IUD was significantly improved shortly thereafter. Other effective methods such as condoms, diaphragms, and spermicides are still used with excellent results by many women; however, it is thought that their interference with the sexual act dampens their potential popularity. Hormone-based injectable contraceptives are used in some countries. In this

[5]John C. Caldwell, "Fertility Control" in John C. Caldwell, ed., *Population Growth and Socioeconomic Change in West Africa*, New York: Columbia University Press for the Population Council, 1975, pp. 58-97.

[6]Department of Economic and Social Affairs, *Fertility and Family Planning in Europe around 1970: A Comparative Study of Twelve National Surveys*, Population Studies No. 58, United Nations: New York, 1976.

report injectables are included in the "other modern methods" category.

Table 2 displays the percent of all contraceptive users relying on each of the five types of methods. This makes it easy to compare the use of each method across boundaries. The total contraceptive prevalence rate is provided so that the reader can calculate the proportion of married women who use each type of method.

Among contraceptive users around the world, the oral contraceptive is the most common method. At least 20 percent of current users rely on the pill in the great majority of countries shown. However, beyond this, few global generalizations can be made. The mix of methods used in individual countries will be discussed in a regional context. The summary will remark on some of the forces shaping the method mix.

Africa

In general, the statistics in Table 2 must be studied with caution. For example, Ghana, Tunisia, and Morocco data are from service statistics, which do not measure traditional methods. This overstates the relative use of modern methods, and, in Africa, produces a serious bias in a study of contraceptive behavior. Anthropological and demographic work has emphasized the important role of abstinence, prolonged breastfeeding, and other traditional methods in spacing births. Survey data from Kenya and Mauritius show 40 and 30 percent of contraceptive users, respectively, rely on traditional methods.

Despite the bias, it is clear that there is substantial reliance on orals among users in North and sub-Saharan Africa. However, a considerable proportion of users in Tunisia and Morocco rely on the IUD, and Ghana has an unusually high percentage of condom users. Surgical sterilization is rare throughout the continent, with the exception of Tunisia; but, since the prevalence of contraceptive use is low, very few married women in Tunisia are sterilized. Twenty-eight percent of all current users in Tunisia have been sterilized, but that amounts to only 5.5 percent of the married women of reproductive age.

Asia

South Asia is characterized by a relatively low proportion of users relying on the pill and a high proportion surgically sterilized. Nepal and India are extreme cases. Although the Nepal data are subject to question because of the small number of current users who were interviewed, the information on India, based on program statistics, is confirmed by surveys taken in the early 1970s that show only a small proportion of users relying on traditional methods. The most striking aspect of India's method mix is the predominance of sterilization. Oral contraceptives have never been introduced in India's national family planning program, and efforts to promote the IUD have not been successful. Condoms have been distributed free and through commercial outlets since the late 1960s.

Bangladesh has a more typical method mix. Over 30 percent of users are on the pill, but approximately equal numbers rely on traditional methods. Sterilization is relatively infrequent. Sri Lanka has the highest contraceptive prevalence rate in the region, but in many respects it resembles its neighbors: pill use is low and 30 percent of current users are sterilized. Rhythm (25.3 percent) and abstinence (11.1 percent) are also quite common.

Sterilization is not used extensively in the four Southwest Asian countries shown in Table 2. In Lebanon and Syria withdrawal and rhythm are popular methods. The pill is the choice of at least half of the users in Afghanistan, Syria, and Jordan and 20 percent in Lebanon.

Sterilization is quite common in Fiji, South Korea, and Singapore and is used by 20 percent or more of the contraceptors in Taiwan and Hong Kong. It is less common in the Southeast and East Asian countries with the lowest prevalence rates: Indonesia, Malaysia and the Philippines.

More than fifteen percent of women who practice family planning rely on condoms in Singapore (29.5 percent), Taiwan (18.5 percent), and Hong Kong (17.8 percent), accounting for most of the "other modern" methods used. Oral contraceptives are taken by at least half of the women who use contraception in Indonesia and Malaysia, but they are considerably less important in the other countries. The IUD is extremely popular in Taiwan and as popular as the pill in South Korea. Fifty percent of users in the Philippines rely on traditional methods, the highest proportion in the region.

Latin America

Latin America contains another mosaic of widely varying method mixes. Sterilization is the most common technique in Panama, a country with one of the highest prevalence rates, and in El Salvador, with one of the lowest rates in the region. The proportion of contraceptive users relying on orals tends to fall between 30 and 40 percent, but it is higher in Paraguay and lower in Peru.

Peru is the only Latin American country shown in Table 2 where women rely mainly on traditional methods. Another deviation is the high dependence on IUDs in countries as diverse as Ecuador and Venezuela.

Like their neighbors in Latin America, Caribbean countries exhibit a moderately high use of oral contraceptives. Sterilization is frequently used in Puerto Rico and the Dominican Republic. In the other three countries, Barbados, Jamaica, and Trinidad and Tobago, condom use is prevalent. Traditional methods and IUDs are used almost equally across each of the five countries.

More Developed Countries

The wide differences in the methods used to control fertility by women in developed countries reinforces the conviction that there are no simple generalizations about method mix. The more developed countries, with few exceptions, have high rates of contraceptive use. Only in Spain and Ireland was the government actively limiting the availability of contraceptives at the time of the survey, and even in those countries the majority of women were affluent enough to obtain supplies from the private sector. Yet, traditional methods—predominately withdrawal—are used by more than 50 percent of couples practicing contraception in Czechoslovakia, Ireland, Poland, Romania, Spain, and Yugoslavia. These countries also have the lowest prevalence rates among developed countries and a low reliance on oral contraceptives.

More importantly, in Australia, Belgium, France, and Hungary, which have nearly universal contraceptive use, 30 percent or more of the users rely on traditional methods. On the other hand, withdrawal and rhythm are relatively rare in Denmark, the Netherlands, and the United States. The Netherlands has an unusually high proportion of IUD users. Sterilization is particularly popular in the United States.

Table 2 Percent of Current Contraceptors Using Each Method and the Total Contraceptive Prevalence Rate for Women in Union in the Reproductive Ages, for Selected Countries[1]

Region and Country	Percent of Contraceptors Using: Pill	IUD	Other Modern Reversible Method	Traditional	Sterilization	Contraceptive Prevalence Rate
NORTHERN AFRICA						
Egypt	84.0	8.7	1.5	5.6	—	20
Morocco	58.2	37.3	4.5	—	—	7
Tunisia	28.2	36.8	3.4	—	31.6	17
SUB-SAHARAN AFRICA						
Ghana	54.5	9.1	36.4	—	—	4
Kenya	30.0	10.0	10.0	40.0	10.0	7
Mauritius	45.7	4.3	15.2	32.6	2.2	50
SOUTHWEST ASIA						
Jordan	50.3	9.6	6.9	25.6	7.6	23
Lebanon	20.8	18.9	11.3	45.2	3.8	53
Syria	50.9	—	14.0	35.5	—	23
Turkey	16.1	7.9	9.5	64.7	1.6	40
MIDDLE SOUTH ASIA						
Afghanistan	60.0	10.0	30.0	—	—	2
Bangladesh	35.8	6.2	11.1	37.1	9.9	8
India	—	4.1	12.3	—	83.6	24
Nepal	17.4	—	8.7	—	69.6	2
Pakistan	21.6	11.8	25.5	27.6	15.7	5
Sri Lanka	5.1	15.9	8.7	39.0	30.6	33
SOUTHEAST ASIA						
Indonesia	56.7	20.9	9.4	12.6	0.4	28
Malaysia	50.8	2.2	9.5	27.0	10.6	36
Philippines	12.8	6.4	11.0	55.1	14.4	38
Singapore	23.7	4.3	42.5	—	29.5	71
Thailand	41.0	7.5	12.9	7.7	30.9	53
EAST ASIA						
Hong Kong	36.1	3.2	26.5	11.2	22.8	77
Korea, Rep. of	13.2	17.6	10.8	20.9	37.4	54
Taiwan	12.3	49.2	18.5	—	20.0	65
NORTH AMERICA						
United States	32.9	9.0	20.6	9.0	28.5	68
MIDDLE AMERICA/CARIBBEAN						
Barbados	27.8	10.8	39.8	7.6	14.0	64
Costa Rica	38.8	7.3	19.2	13.7	21.0	65
Dominican Republic	26.0	9.3	11.7	15.8	37.2	33
El Salvador	25.3	9.6	4.4	8.4	52.3	34
Guadeloupe	22.2	7.8	14.2	29.5	26.3	44
Guatemala	29.8	7.2	13.3	14.4	35.4	18
Jamaica	32.0	4.9	38.4	5.4	19.4	41
Martinique	33.7	5.1	14.2	24.2	22.8	51
Mexico	37.4	16.7	10.2	20.7	18.2	42
Panama	31.1	6.6	6.6	6.5	49.2	61
Puerto Rico	32.7	5.9	4.7	10.0	46.6	61
Trinidad & Tobago	38.6	6.8	31.8	18.2	4.5	44

Region and Country	Percent of Contraceptors Using: Pill	IUD	Other Modern Reversible Method	Traditional	Sterilization	Contraceptive Prevalence Rate
SOUTH AMERICA						
Colombia	39.2	16.1	10.8	18.1	15.7	49
Guyana	30.7	18.3	17.0	9.4	24.6	32
Ecuador	36.5	52.4	9.5	—	1.6	6
Paraguay	42.2	14.3	12.7	18.6	12.2	24
Peru	13.9	4.5	19.9	53.5	8.2	34
Venezuela	31.4	17.6	12.5	22.7	15.8	49
NORTHERN EUROPE						
Denmark	35.9	12.3	44.9	6.8	—	76
Finland	26.0	4.0	48.0	22.0	—	77
Ireland	15.6	1.1	6.1	77.2	—	60
Norway	22.7	39.2	28.4	9.8	—	71
United Kingdom	32.6	8.1	27.9	11.9	20.9	75
WESTERN EUROPE						
Belgium	38.4	3.6	8.6	43.2	6.2	81
France	38.9	12.3	10.1	32.8	5.8	79
Netherlands	65.7	5.7	15.7	7.1	5.7	70
EASTERN EUROPE						
Czechoslovakia	4.0	14.0	27.0	55.0	—	66
Hungary	49.4	13.1	7.0	30.0	—	73
Poland	4.0	1.0	22.0	72.0	—	57
Romania	1.0	—	8.0	91.0	—	57
SOUTHERN EUROPE						
Spain	23.2	1.1	12.8	62.3	0.6	51
Yugoslavia	9.0	2.0	14.0	76.0	—	59
OCEANIA						
Australia	38.9	9.0	15.0	31.4	5.7	67
Fiji	20.8	11.7	15.4	14.9	37.2	41

[1]See the text for an explanation of the groupings of contraceptive methods. Table 1 describes the sources from which the data are derived.

Method Mix Summary

Although a few generalizations could be drawn about the prevalence of specific contraceptive methods within regions, Table 2 gives the impression of a myriad of combinations. Even countries that have the same level of contraceptive use have very different method mixes.

The proportion of women using each method is a product of the supply of different methods and the demand by couples to use them. This is also true of the level of total contraceptive use, but, since traditional methods do not require the purchase of supplies and therefore are "free" to each couple, public programs cannot totally influence the practice of contraception. On the other hand, programs can alter the supply of specific modern methods.

In effect, a country's method mix may be a result of the explicit or implicit policy of the government and other providers of contraceptives. The Republic of Korea is an example of the influential role of government policy. During the 1960s Korea's family planning policy promoted the use of IUDs by rural women through public programs. Oral contraceptives were not distributed by the program until 1968 when it was decided that alternative methods were necessary for some women. However, IUDs continued to be the government's preferred method until 1976, when dissatisfaction with high discontinuation rates and the discovery that 85 percent of couples practicing contraception did so to terminate childbearing, led to a policy decision to promote surgical sterilization.

Surveys taken during Korea's IUD promotion campaign indicate that while the method was not substantially more popular than orals, it had at least an equal number of users. As Table 2 shows, this is an unusual method mix since oral contraceptives are normally much more prevalent than IUDs. The increase in sterilization was even more dramatic. In 1966 only 2 percent of married couples of reproductive age had been sterilized for contraceptive reasons. This had risen to only 11 percent by the time the government decided to encourage sterilization in 1976. Three years later sterilization was used by 23 percent of married women and 42 percent of all contraceptive users.

The literature also suggests that women with different cultural backgrounds do not have the same preferences for contraceptive methods, resulting in different method mixes. In a recent study, family planning clinic patients in India, Korea, the Philippines, and Turkey were given identical, balanced presentations on the advantages and disadvantages of the pill, the IUD, and the injectable contraceptive, "Depo-Provera," and encouraged to choose the best method for themselves.[7] The women's choices varied considerably: for example, 9 percent of the women in India chose Depo-Provera, but it was preferred by 60 percent of the women in the Philippines.

In Indonesia, societal attitudes have contributed to the IUD's popularity in Bali but not in Java.[8] Balinese women, predominately Hindu, are accustomed to males aiding in childbirth, but the Muslim women of Java have female birth attendants, so are hesitant to have male doctors insert an IUD.

Age-specific Rates

Age-specific rates of contraceptive use are important because of their relation to fertility. In the absence of conscious contraceptive activity, fertility (often called natural fertility) can vary considerably because of other important factors such as marriage patterns, the biological ability to bear children, and the average length of breast-feeding. But the age pattern of natural fertility is constant because of biological constraints. The capacity to conceive and bear children normally follows menarche (about age 12-15), attains a broad maximum by age 20, falls slightly by age 30, and then declines at an accelerated pace after age 35. Only a very small minority of women can bear children after age 50.

Because fecundity declines with age, family planning can have the greatest impact on a population's birth rate when it is practiced by women with the highest potential fertility. This can be demonstrated by a model of natural fertility developed by statistician and demographer Louis Henry.[9] If one thousand women aged 20-24 and another thousand women aged 30-34 accept a 100 percent effective contraceptive and use it correctly for two years the younger women would avert 440 births in the second year. The older women would avert only 370 births, or 16 percent fewer than the younger women. Under the same circumstances women aged 35-39 would avert 300 births, 37 percent fewer births than the youngest age group.

The percent of married women using contraception in each age group is shown in Figure 1. Although no two countries have the same contraceptive use curve, two general patterns emerge. The more common shape, resembling an inverted U, indicates that the proportion of users is lowest in the youngest and oldest ages. A flatter slope illustrates contraceptive use in many of the more developed countries, where young married women are more likely to practice contraception than in developing countries. The rates in the United States, Denmark, France, Belgium, and, to a lesser extent, Australia, peak in the middle age groups and then decline, but the slope of the rise and fall is gradual. Since women over 45 years old were not interviewed in many of the more developed countries, the extent of the decline in contraceptive use among older women is not known. Pakistan, Kenya, Bangladesh, and Nepal have flatter curves than some of the European countries only because contraceptive use is uniformly low in all age groups.

The age-specific curves vary a great deal, but the reasons behind this are not easy to identify. Not all European countries have the flatter shape: Ireland's use rate peaks very sharply in the 30-34 year age group, and Spain's curve declines rapidly in the older ages, although the rates for younger married women are quite similar to the peak rate. Nor do all countries with high prevalence rates have the flatter curve. Japan, with a contraceptive prevalence level of 68 percent, Costa Rica with 66 percent, and Panama with 61 percent all have pronounced inverted U shaped curves.

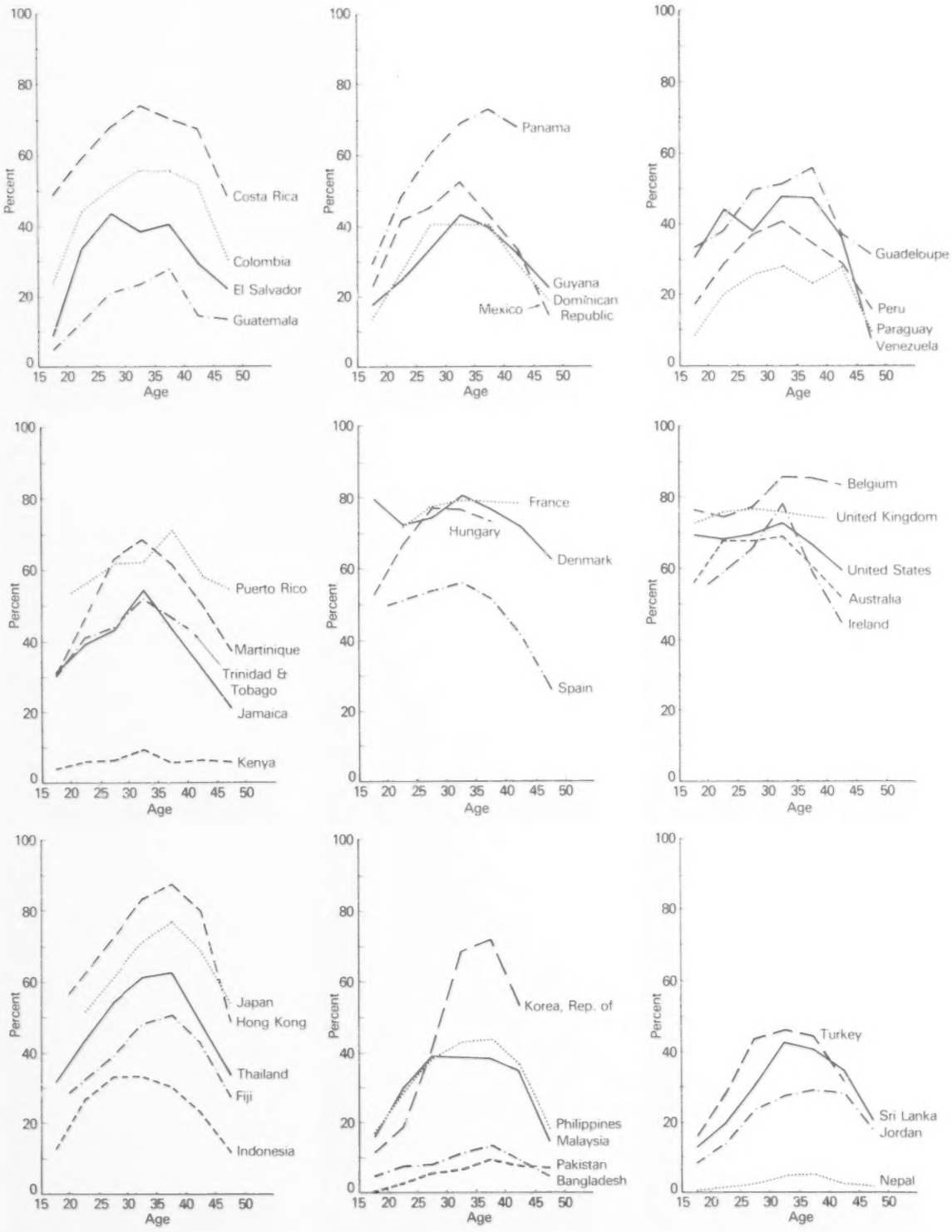
In the majority of countries shown, the proportion of married women using contraception increases with age until 30-34 or 35-39. It would seem that in these countries many women choose to use contraception only after they have had time to bear several children. They practice family planning when they want to postpone a birth or to terminate childbearing. The specific motivation for using contraception—spacing or limiting births—is not as important as the timing of the decision. Countries as different as Japan, Ireland, Peru, and Sri Lanka

[7]World Health Organization Task Force on Psychosocial Research in Family Planning and Task Force on Service Research in Family Planning, "User Preference for Contraceptive Methods in India, Korea, the Philippines, and Turkey," *Studies in Family Planning* (Sept./Oct., 1980), pp. 267-273.

[8]Terence H. Hull, Valerie J. Hull and Masri Singarimbin, "Indonesia's Family Planning Story: Success and Challenge," *Population Bulletin* Vol. 32, No. 6 (1977), pp. 19-22.

[9]Numerical example from Dorothy L. Nortman, "Sterilization and the Birth Rate," *Studies in Family Planning* (Sept./Oct. 1980), pp. 286-300.

Figure 1 Age-Specific Contraceptive Use Rates for Selected Countries[1]



[1]*Table 1 describes the sources from which the data are derived. Age detail is available only from surveys. Rates for women age 45-49 were included in the charts when known, so the age range may not correspond with that given in Table 1.*

have essentially the same pattern of age-specific use. In countries with a flatter curve, contraception is chosen at an earlier age by women who have been married for less time and have fewer children. This implies a very different subjective approach to family planning, transcending the prevalence of contraceptive use, the program effort, and socioeconomic conditions.

The decline in contraceptive use among older women has two possible explanations. First, the likelihood of pregnancy declines with age. When a woman is convinced that she is sterile, she will not use a contraceptive. The older the age group, the higher the proportion of women who believe that they are unable to conceive. In countries with a high level of use and a flat curve, a substantial percentage of women will have used contraception for most of their married lives and may be unaware of increasing infecundity. Rates of use therefore would be expected to decline less rapidly. Second, in areas where family planning is still a new idea, older women may be the most resistant to change. For example, in Spain younger women appear to behave much like women of similar age in other European countries, yet older women have much lower use rates. In countries where contraception has a well established place in marital relations, there should be no differences in the attitudes of specific age groups and prevalence rates will be less likely to decline among older women. But this explanation is not universal. In Japan, despite a long history of birth limitation, the age-specific use pattern declines steeply in the older ages.

Imagine two countries that are identical in aspects which directly influence fertility (marriage patterns as well as level and types of contraceptives used), but with different age-specific use rate curves. The population with the inverted U shape curve would be expected to have higher fertility than the population with a flatter curve. In the former, women with the highest potential fertility have a lower prevalence of contraceptive use, so fewer births are averted.

Median Age of Contraceptors

The family planning needs of women at different ages are reflected in their choice of specific methods. Table 3 presents the median age of users of each of the five types of contraceptive methods discussed earlier. It also gives the median age of all married women in the sample and of users of any method.

A median age is the age that divides a group in half, with half older than that age and half younger. Those shown in Table 3 are derived from published reports giving the distribution of women in five or ten year age groups. Because data were not available by single years of age, the median age should be taken as only a rough indicator of the average age of the women. But when comparing two groups it generally can be assumed that the women in the group with the higher median age are, on average, older. This report does not show the age-specific use rates for each of the categories of women because in many incidences the estimate would have been based on too few women to be reliable.

In countries where most women marry young, the median age of married women is low. It is high in countries with a late age at first marriage. The median age is also affected by the relative proportion of women in each age group due to past fertility. In Table 3 it ranges from a low in Bangladesh of 26.2 years to a high in Hong Kong and Spain of 35.8 years.

In order to study the age patterns of use by method, the median age of users of all methods and each type of method should be compared to the median age of all married women in the childbearing ages in the same country. Comparisons of the average age of users should not be made between countries because they are confounded by the countries' differences in age structure and marriage patterns.

In almost all countries the median age of users is virtually the same or higher than the median age of all married women. This is consistent with the observation that, typically, use rates are lower among young married women, and peak only in the 30-34 or 35-39 year age groups. In most countries, the majority of women aged 25-29 are in stable unions.

The users are younger than all married women in Peru, Belgium, Ireland, Spain, and the United Kingdom. This is due to a combination of high use rates for women under age 30 and a decline in the use of contraceptives among older women at a more rapid rate than the fall in the proportion who are married.

In every country except Peru IUD users are older than women who rely on the pill, even though both methods are similar in that they are highly effective, coitus-independent, and reversible. Aside from the medical risks associated with pill use among older women, a woman who has carried a child fullterm experiences less discomfort with an IUD than one who has never been pregnant. Women who are unsure whether they want contraception or desire it for only a short time would be attracted to the pill because the method can be stopped easily, while the IUD user must have the assistance of a physician or trained medical worker. IUD users have been found to have a longer average span of use than women on the pill. A sample of current IUD users has a larger proportion of women who started longer ago than a comparable sample of women taking oral contraceptives, and this would tend to increase the average age of IUD users.

Another consistent finding in Table 3 is the high median age of women who rely on surgical sterilization for protection against pregnancy. In every country shown the median age of those using sterilization is higher than for all users and all married women. The median age is generally higher for the sterilized group than for any other method group in the country. It is not surprising that sterilization—virtually 100 percent effective, permanent, and relatively free of side effects—appeals to older women. However, part of the reason for the high median age is that women who were sterilized in the past are not withdrawn from the group of current users until they are no longer of reproductive age or are widowed, divorced, or separated.

Women who use modern methods other than the pill and IUD are not consistently younger or older than all married women or all users. Most of these users rely on the condom and its appeal to women of specific ages seems to vary by the local conditions in each country. On the other hand, women who use traditional methods have a higher median age than the sample of married women, and in twenty-one developed and developing countries their median age is higher than that of women relying on the IUD.

It is not clear why traditional methods are chosen by older women. Withdrawal and rhythm are less reliable than the well-known modern methods; but their use entails no supply problems, no health side effects, but their use entails and can be discontinued at any time. If it is true that younger women are less committed to contraception or use it for spacing births, one would expect traditional methods to be the choice of the young. While a detailed analysis cannot be attempted here of why women of certain ages use rhythm, withdrawal, and

Table 3 Median Age of Women in Union in the Reproductive Ages and the Median of Users by Method for Selected Countries, 1970-1980[1]

Region and Country	Median Age of Women in the Reproductive Age: All Women in Union	Women Using Any Method	Women Using the Pill	Women Using IUD	Women Using Other Modern Reversible Methods	Women Using Traditional Methods	Women Protected by Sterilization
ASIA							
Bangladesh	26.8	29.8	28.8	36.9	24.8	29.3	36.0
Fiji	31.3	32.5	29.5	31.7	28.0	30.8	36.6
Hong Kong	35.8	35.7	29.8	40.8	36.4	38.2	38.8
Indonesia	31.1	31.0	29.5	33.3	32.7	32.7	—
Jordan	31.2	33.3	31.6	33.2	34.8	33.3	39.5
Korea, Rep. of	33.8	35.3	33.7	36.3	33.0	36.2	35.3
Malaysia	33.2	32.6	30.8	33.8	33.4	34.1	38.3
Nepal	28.7	33.4	—	—	—	—	—
Pakistan	30.2	35.5	33.5	36.2	31.8	36.8	40.8
Philippines	33.7	33.7	31.1	33.8	32.5	33.9	35.4
Sri Lanka	33.4	34.1	30.6	31.5	30.9	34.9	35.7
Thailand	32.6	32.8	30.4	36.3	30.8	31.4	35.7
Turkey	31.3	32.2	29.7	29.8	33.9	40.9	—
LATIN AMERICA							
Colombia	31.6	32.2	28.3	33.0	31.7	34.1	37.8
Costa Rica	30.9	31.4	26.5	32.5	31.0	33.4	38.3
Dominican Republic	29.9	30.9	26.9	30.8	30.8	31.8	34.4
El Salvador	30.2	30.3	27.7	33.6	—	32.5	33.0
Guatemala	29.7	32.9	28.6	—	—	32.4	35.1
Guyana	29.9	31.6	28.3	29.8	30.7	29.7	38.5
Jamaica	30.2	30.1	27.7	35.3	26.9	31.8	38.5
Mexico	30.3	30.0	27.4	28.3	29.6	31.5	35.1
Panama	29.9	31.6	26.6	—	—	29.6	36.8
Paraguay	29.5	31.4	31.7	—	—	32.6	41.6
Peru	32.7	32.1	30.0	27.7	32.1	32.1	37.7
Puerto Rico	33.5	33.8	28.2	35.0	30.8	34.7	37.4
Trinidad & Tobago	29.4	30.3	—	—	—	—	—
Venezuela	29.9	29.2	27.0	31.0	30.7	30.5	37.3
MORE DEVELOPED COUNTRIES							
Australia	31.7	31.0	28.0	31.4	35.1	32.3	—
Belgium	32.6	33.1	29.3	31.7	32.9	35.6	38.6
Denmark	31.7	31.7	30.2	31.6	32.6	33.4	—
France	31.2	32.1	28.2	32.2	33.9	34.3	37.9
Hungary	29.9	30.2	28.4	30.0	31.2	32.5	—
Ireland	34.6	33.3	/— — — —	30.3	— — — — —/	34.3	—
Spain	35.8	33.8	29.2	—	33.4	36.1	—
United Kingdom	35.3	34.4	28.9	32.5	37.7	40.1	36.7
United States	31.1	30.9	26.4	29.7	29.9	33.3	35.1

[1]See Table 1 for description of sources.

abstinence, cultural attitudes may play an important role. In many countries older women may be the strongest opponents to "unnatural" family planning methods. They are likely to be less educated and to show a greater belief in traditional values. Women who feel uncomfortable in general about using contraception might postpone trying any method until the end of their childbearing years. At that time traditional methods may be the least stressful. If older women are using traditional methods to terminate childbearing, their continuation rates would be high, further raising the median age of users. Older women who have intercourse infrequently may feel that traditional methods are the most appropriate.

The information in Table 3 indicates that, in a typical country, young married women will rely more on oral contraceptives and less on traditional methods and surgical sterilization. The earlier discussion of age-specific use rates stressed that family planning has the largest potential demographic effect when it is prevalent among women in their twenties during the peak childbearing years. This suggests, assuming an equal number of users in each category, that at any point in time pill users are on average averting more births than sterilized women. In most cases, pill use is more demographically effective than use of the IUD and the practice of traditional methods.

Conclusion

The data assembled in this report reflect, in part, the growing concern of governments, international organizations, and private citizens about family planning as a humanitarian, health, and social welfare issue. But, despite recent improvements in information-gathering, knowledge about contraceptive behavior is still fragmentary. There is virtually no reliable data for sub-Saharan Africa and very little national data for South America and most of Southeast and Southwest Asia. Many of the more developed countries such as Canada, Sweden, and the USSR have not conducted national family planning surveys.

The information that is available suggests that the prevalence of contraceptive use is very low in Africa and low to moderate in most of Asia and Latin America. But, high rates of contraception are being obtained in many areas and family planning is no longer a phenomenon unique to the Western world.

Because women in their twenties have the highest potential fertility of all age groups, contraception probably has a stronger demographic impact where a high percentage of young married women are practicing family planning, in many of the more developed countries. Large proportions of women in the developing world tend to rely on contraceptives only during their middle childbearing years, probably with the intent of limiting their family size to the present number. They choose contraception at a later age, after more years of married life, and with a greater number of children.

The contraceptive techniques that women eventually choose are influenced by the availability of modern services, and the cultural acceptability of different methods. Governments and others who provide family planning services can structure these choices.

Certain global patterns emerge concerning the ages at which women practice family planning and use specific methods, although countries vary widely in their particular mix of contraceptives. It is not true that women in traditional countries are attracted solely to traditional methods, but older women may be less likely to rely on modern contraceptives than younger women.

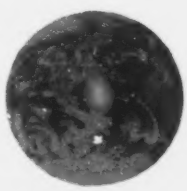
Reversible methods, which have proven the most attractive to younger women, may also be the most effective for fertility control. In virtually every country pill users are younger than IUD users, and in general the popularity of the pill is greater than that of the IUD. Sterilization, used to a large extent in the older age groups, may be less demographically effective than the pill since younger women have the potential to bear more children.

Founded in 1929, the Population Reference Bureau is now in its second half century of "telling the world about population." PRB members regularly receive the most vital, up-to-date information available from the authorities who write PRB's six annual POPULATION BULLETINS; from the monthly summaries of population-related events reported in the international news magazine INTERCOM; and from the widely used WORLD POPULATION DATA SHEET wall chart, a yearly update of demographic data for some 170 countries. Educator, student, library, and institutional members also receive the population education newsletter INTERCHANGE, plus ready-to-use classroom materials, four times during the school year.

PRB also issues the POPULATION TRENDS AND PUBLIC POLICY series of occasional papers, INTERCOM IN SPANISH, and special publications such as THE UNITED STATES POPULATION DATA SHEET, the WORLD'S CHILDREN DATA SHEET and the WORLD'S WOMEN DATA SHEET; wall charts on FERTILITY AND THE STATUS OF WOMEN, POPULATION DYNAMICS OF THE WORLD, and WORLD FERTILITY: AGE-SPECIFIC RATES FOR 120 COUNTRIES; the POPULATION HANDBOOK; REPORTS ON THE WORLD FERTILITY SURVEY; four-page EXECUTIVE SUMMARIES of selected population topics; and POLICY SUPPLEMENTS to selected BULLETINS. Write for a listing of publications in print at the address below.

For still more information, PRB's Library and Information Service stands ready to answer telephone, written, or on-site queries, backed by one of the world's oldest and most complete population libraries and contacts with population people throughout the world.

Members of the Population Reference Bureau support an organization that is dedicated to the objective analysis and reporting of one of the world's most compelling concerns.



Population Reference Bureau, Inc.
1337 Connecticut Avenue, N.W.
Washington, D.C. 20036 USA
(202) 785-4664
Cable Address: POPREF WASHINGTON D.C.

Editor: Mary Barberis Production: Sarah Korte Plumb Graphics: George Hager